

FORM PTO-1390 (REV. 01-2003)		US DEPARTMENT OF COMMERCE PATENT & TRADEMARK OFFICE		ATTORNEY'S DOCKET NUMBER 123457	
<b>TRANSMITTAL LETTER TO THE UNITED STATES          DESIGNATED/ELECTED OFFICE (DO/EO/US)          CONCERNING A FILING UNDER 35 U.S.C. 371</b>				U.S. APPLICATION NO. (If known, see 37 CFR 1.5) New U.S. Patent Application <b>107537513</b>	
INTERNATIONAL APPLICATION NO. PCT/JP03/15636		INTERNATIONAL FILING DATE December 5, 2003		PRIORITY DATE CLAIMED December 6, 2002	
TITLE OF INVENTION TWO-DIMENSIONAL PHOTONIC CRYSTAL OPTICAL MULTIPLEXER/ DEMULTIPLEXER UTILIZING BOUNDARY REFLECTION					
APPLICANT(S) FOR DO/EO/US Susumu NODA; Takashi ASANO					
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:					
1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a filing under 35 U.S.C. 371. 2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a filing under 35 U.S.C. 371. 3. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. 4. <input type="checkbox"/> The US has been elected (Article 31): 5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)) a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau). b. <input checked="" type="checkbox"/> has been communicated by the International Bureau. c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). 6. <input checked="" type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)) a. <input checked="" type="checkbox"/> is attached hereto. b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4). c. <input type="checkbox"/> The International Application was filed in English. 7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau). b. <input type="checkbox"/> have been communicated by the International Bureau. c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. d. <input type="checkbox"/> have not been made and will not be made. 8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). 10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).					
<b>Items 11 to 20 below concern document(s) or information included:</b>					
11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 12. <input checked="" type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. <input checked="" type="checkbox"/> A preliminary amendment. 14. <input checked="" type="checkbox"/> An Application Data Sheet under 37 CFR 1.76. 15. <input type="checkbox"/> A substitute specification. 16. <input checked="" type="checkbox"/> A power of attorney and/or change of address letter. 17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825. 18. <input type="checkbox"/> A second copy of the published international application under 35 U.S.C. 154(d)(4). 19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4). 20. <input type="checkbox"/> Other items or information:					

U.S. APPLICATION NO. (If known, see 37 CFR 1.51) New U.S. Patent Application <b>10/537513</b>		INTERNATIONAL APPLICATION NO. PCT/JP03/15636		ATTORNEY'S DOCKET NUMBER 123457	
21. <input checked="" type="checkbox"/> The following fees are submitted:				<b>CALCULATIONS</b> <b>PTO USE ONLY</b>	
<b>BASIC NATIONAL FEE (37 CFR 1.492(a)):</b> ..... \$ 300.00				\$300	
<b>SEARCH FEE (37 CFR 1.492(b)(1)-(3)):</b>				\$400	
International search fee (37 CFR 1.445(a)(2)) paid to USPTO as ISA..... \$ 100.00					
International search report provided to USPTO no later than the time at which the search fee is paid ..... \$ 400.00					
All situations not provided for above ..... \$ 500.00					
<b>EXAMINATION FEE (37 CFR 1.492(c)(1)-(2)):</b>				\$200	
International preliminary examination report prepared by the USPTO as IPEA and favorable as to novelty, inventive step, and industrial applicability for all claims presented in the application entering the national stage ..... \$ 100.00					
All situations not provided for above ..... \$ 200.00					
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).					
TOTAL PAGES OF APPLICATION OVER 100 ( - 100)		÷ 50	= †	x 250 =	\$
†round up to next integer					
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$	
TOTAL CLAIMS	20 - 20	= 0	x 50.00 =	\$	
INDEPENDENT CLAIMS	2 - 3	= 0	x 200.00 =	\$	
MULTIPLE DEPENDENT CLAIM(S)(if applicable)			+ 360.00 =	\$	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				\$900	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by ½.				\$	
<b>SUBTOTAL =</b>				\$900	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$	
<b>TOTAL NATIONAL FEE =</b>				\$900	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +				\$	
<b>TOTAL FEES ENCLOSED =</b>				\$900	
				Amount to be refunded:	\$
				charged:	\$
a. <input checked="" type="checkbox"/> Check No. 167299 in the amount of \$900 to cover the above fees is enclosed. b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of \$_____ to cover the above fees. A duplicate copy of this sheet is enclosed. c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>15-0461</u> . A duplicate copy of this sheet is enclosed. d. <input type="checkbox"/> Fees are to be charged to a credit card. <b>WARNING:</b> Information on this form may become public. <b>Credit card information should not be included on this form.</b> Provide credit card information and authorization on PTO-2038.					
<b>NOTE:</b> Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.					
SEND ALL CORRESPONDENCE TO: OLIFF & BERRIDGE, PLC Customer Number: 25944					
Date <u>June 3, 2005</u>			NAME: James A. Oliff REGISTRATION NUMBER: 27,075  NAME: Eric D. Morehouse REGISTRATION NUMBER: 38,565		